Research Question:

How does soda tax affect retail store sales?

Research Design:

Data: weekly sales data from retail stores affected by the tax (in Berkeley) and surrounding stores not affected by tax (outside of Berkeley in Alameda county).

Model: Use scikit-learn to run linear regression of store weekly sales on tax dummy, store fixed effect and time fixed effect to estimate the effect of tax on store sales using diff in diff approach.

Predict store sales if tax were implemented for stores not actually affected by the soda tax.

Use Matplotlib to plot the store sales trend from the real data, predicted under tax and predicted without tax.

Use plotly to visualize the effect of soda tax on store sales on a fully functioning web app.